Exploring Aeronautics			
2008 Mathematics			
Content Standards			
Wyoming Mathematics			
Grade 5			
Activity/Lesson	**State**	**Standards**	
Fundamentals of Aeronautics (145-176)	WY	MA.5.MA5.5.1	Students systematically collect, organize, and describe/represent categorical data using bar graphs.
Fundamentals of Aeronautics (145-176)	WY	MA.5.MA5.5.2	Students find and interpret mode for data sets in a problem-solving setting appropriate to grade level. Students communicate their findings.
Wings(177-208)	WY	MA.5.MA5.3.5	Students determine area and perimeter of triangles, rectangles, and squares using models in problem-solving situations using appropriate units.
Tools of Aeronautics(257-326)	WY	MA.5.MA5.5.3	Students predict and record outcomes of probability experiments or simulations.
The Tools of Aeronautics	WY	MA.5.MA5.5.3	Students predict and record outcomes of probability experiments or simulations.
Integrating with Aeronautics	WY	MA.5.MA5.3.1	Students apply estimation and measurement of length to content problems using actual measuring devices and express the results in U.S. customary units (parts of inch-halves/fourths, eights inches, feet, yards, and miles).
Integrating with Aeronautics	WY	MA.5.MA5.4.1	Students recognize, describe, extend, create, and generalize patterns by using manipulatives, numbers, and graphic representations, including charts and graphs.
Integrating with Aeronautics	WY	MA.5.MA5.5.2	Students find and interpret mode for data sets in a problem-solving setting appropriate to grade level. Students communicate their findings.
Intro to Aeronautics (109-123)	WY	MA.5.MA5.5.1	Students systematically collect, organize, and describe/represent categorical data using bar graphs.
Scientific Method(124-144)	WY	MA.5.MA5.5.1	Students systematically collect, organize, and describe/represent categorical data using bar graphs.
Scientific Method(124-144)	WY	MA.5.MA5.5.3	Students predict and record outcomes of probability experiments or simulations.
Exploring Aeronautics			
2008 Mathematics			
Content Standards			
Wyoming Mathematics			
Grade 6			
Activity/Lesson	**State**	**Standards**	

Activity/Lesson	State	Standards	
Fundamentals of Aeronautics (145-176)	WY	MA.6.MA6.3.1	Students apply estimation and measurement of length to content problems and express the results in metric units (centimeters and meters).
Fundamentals of Aeronautics (145-176)	WY	MA.6.MA6.4.1	Students recognize, describe, extend, create, and generalize patterns, such as numeric sequences, by using manipulatives, numbers, graphic representations, including charts and graphs.
Fundamentals of Aeronautics (145-176)	WY	MA.6.MA6.5.1	Students systematically collect, organize, and describe/represent numeric data using line graphs.
Science of Flight	WY	MA.6.MA6.3.2	Students apply estimation and measurement of weight to content problems and express the results in U.S. customary units (ounces, pounds, and tons).
Science of Flight	WY	MA.6.MA6.5.1	Students systematically collect, organize, and describe/represent numeric data using line graphs.
Integrating with Aeronautics	WY	MA.6.MA6.1.3	Students represent the number line using integers.
Integrating with Aeronautics	WY	MA.6.MA6.4.3	Students represent the idea of a variable as an unknown quantity, a letter, or a symbol within any whole number operation.
Intro to Aeronautics (109-123)	WY	MA.6.MA6.5.1	Students systematically collect, organize, and describe/represent numeric data using line graphs.
Scientific Method(124-144)	WY	MA.6.MA6.5.1	Students systematically collect, organize, and describe/represent numeric data using line graphs.
Exploring Aeronautics			
2008 Mathematics			
Content Standards			
Wyoming Mathematics			
Grade 7			
Activity/Lesson	**State**	**Standards**	
Fundamentals of Aeronautics (145-176)	WY	MA.7.MA7.3.1	Students apply estimation and measurement of length to content problems and convert within the U.S. customary (in, ft, yd, mi) and within the metric system (mm, cm, m, km).
Fundamentals of Aeronautics (145-176)	WY	MA.7.MA7.3.2	Students apply estimation and measurement of weight to content problems expressing the results in metric units (g, kg).
Tools of Aeronautics(257-326)	WY	MA.7.MA7.5.3	Students predict, compare, and report as ratios probable outcomes of experiments or simulations (i.e., impossible, equally likely, certain).
The Tools of Aeronautics	WY	MA.7.MA7.5.3	Students predict, compare, and report as ratios probable outcomes of experiments or simulations (i.e., impossible, equally likely, certain).

Activity/Lesson	State	Standards	
Integrating with Aeronautics	WY	MA.7.MA7.1.4	Students explain their choice of estimation and problem- solving strategies and justify results when performing number operations with fractions and decimals in problem-solving situations appropriate to grade level. Students add and subtract fractions and mixed numbers.
Integrating with Aeronautics	WY	MA.7.MA7.3.2	Students apply estimation and measurement of weight to content problems expressing the results in metric units (g, kg).
Integrating with Aeronautics	WY	MA.7.MA7.3.3	Students apply estimation and measurement of capacity to content problems expressing the results in metric units (liters).
Intro to Aeronautics (109-123)	WY	MA.7.MA7.5.1	Students systematically collect, organize, describe, and analyze data using histograms.
Scientific Method(124-144)	WY	MA.7.MA7.5.1	Students systematically collect, organize, describe, and analyze data using histograms.
Exploring Aeronautics			
2008 Mathematics			
Content Standards			
Wyoming Mathematics			
Grade 8			
Activity/Lesson	**State**	**Standards**	
Wings(177-208)	WY	MA.8.MA8.3.3	Students select and use the appropriate methods, tools, and units to solve problems involving angle measure, perimeter, circumference, area (including circles), and volume of rectangular solids.
Airplane Control(209-256)	WY	MA.8.MA8.3.3	Students select and use the appropriate methods, tools, and units to solve problems involving angle measure, perimeter, circumference, area (including circles), and volume of rectangular solids.
Science of Flight	WY	MA.8.MA8.3.1	Students apply estimation and measurement of weight/mass to content problems and convert within U.S. customary and within metric units (mg, g, kg).
Science of Flight	WY	MA.8.MA8.5.1	Students systematically collect, organize, describe, analyze, and represent data using tables, charts, diagrams, and graphs.
Science of Flight	WY	MA.8.MA8.5.3	Students predict, compare, and calculate probable outcomes of experiments or simulations.
Intro to Aeronautics (109-123)	WY	MA.8.MA8.5.1	Students systematically collect, organize, describe, analyze, and represent data using tables, charts, diagrams, and graphs.
Scientific Method(124-144)	WY	MA.8.MA8.5.1	Students systematically collect, organize, describe, analyze, and represent data using tables, charts, diagrams, and graphs.